

OTPE

## ENTERED

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/079,699

DATE: 03/08/2002 \

TIME: 15:23:36

Input Set : A:\2104seq.txt

Output Set: N:\CRF3\03082002\J079699.raw

4 <110> APPLICANT: Nicholette, Charles A.

6 <120> TITLE OF INVENTION: PAR-3 COMPOUNDS FOR THERAPY AND DIAGNOSIS AND METHODS FOR

USING SAME

8 <130> FILE REFERENCE: GZ 2104.20

C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/079,699

C--> 11 <141> CURRENT FILING DATE: 2002-02-19

- 13 <150> PRIOR APPLICATION NUMBER: 60/226,243
- 14 -(151) PRIOR FILING DATE: 2000-08-17
- 16 <160> NUMBER OF SEQ ID NOS: 12
- 18 <170> SOFTWARE: FastSEQ for Windows Version 4.0
- 20 <210> SEQ ID NO: 1
- 21 <211> LENGTH: 3801
- 22 -(212> TYPE: DNA
- 23 <213> ORGANISM: Homo sapiens
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- 28 gatccaaact actggataca ggtgcatcgc ttggaacatg gagatggagg aatactagac 180
- 29 ettgatgaca ttetttgtga tgtageagae gataaagaea gaetggtage agtgtttgat 240
- 30 gagcaggate cacateaegg aggtgatgge accagtgeea gtteeaeggg tacceagage 300
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- 32 gcaacaagtg aaattgaggt cacacettca gteettegag caaatatgee tetteatgtt 420
- 33 cgacgcagta gtgacccagc tctaattggc ctctccactt ctgtcagtga tagtaatttt 480
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- 35 aagcagaaca ctgctgggag tcctaaaacc tgcgacagga aggatgagga tgggacagaa 600
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- 37 aacttttete tygatgatat gytaaagete ytagaagtee eeaaegatyg agggeetety 720
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- 40 gtcaggatta atgatggcga ccttcgaaat agaagatttg aacaagcaca acatatgttt 900
- 41 cgccaagcca tgcgtacacc catcatttgg ttccatgtgg ttcctgcagc aaataaagag 960
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- 43 gacagccagt atattgacaa caggagtgtg aacagtgcag ggcttcacac ggtgcagaga 1080
- 44 graccegae tgaaccacce geetgageag atagactete acteaagaet aceteatage 1140
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- 52 cttacacctg atggcaccag ggaatttctg acatttgaag tcccacttaa tgattcagga 1620
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- 54 ggaatetttg teaagteeat tattaatgga ggageageat etaaagatgg aaggettegg 1740

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94 <213> ORGANISM: Homo sapiens
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101 Arg Tyr Arg Lys Ala Ile Ala Lys Asp Pro Asn Tyr Trp Ile Gln Val
102
            35
                                40
103 His Arg Leu Glu His Gly Asp Gly Gly Ile Leu Asp Leu Asp Asp Ile
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105 Leu Cys Asp Val Ala Asp Asp Lys Asp Arg Leu Val Ala Val Phe Asp
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109	Gly	Thr	Gln	Ser	Pro	Glu	Ile	Phe	Gly	Ser	Glu	Leu	Gly	Thr	Asn	Asn
110				100					105					110		
111	Val	Ser	Ala	Phe	Gln	Pro	Tyr	Gln	Ala	Thr	Ser	Glu	Ile	Glu	Val	Thr
112			115					120					125			
113	Pro	Ser	Val	Leu	Arg	Ala	Asn	Met	Pro	Leu	His	Val	Arg	Arg	Ser	Ser
114		130					135					140				
115	Asp	Pro	Ala	Leu	Ile	Gly	Leu	Ser	Thr	Ser	Val	Ser	Asp	Ser	Asn	Phe
	145					150					155					160
117	Ser	Ser	Glu	Glu	Pro	Ser	Arg	Lys	Asn	Pro	Thr	Arg	Trp	Ser	Thr	Thr
118					165					170					175	
119	Ala	Gly	Phe	Leu	Lys	Gln	Asn	Thr	Ala	Gly	Ser	Pro	Lys	Thr	Cys	Asp
120				180					185					190		
	Arg	Lys	Asp	Glu	Asp	Gly	Thr		Glu	Asp	Asn	Ser		Val	Glu	Pro
122			195					200					205			
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124		210					215	_				220		_		
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	225		1			230		_			235	_				240
	Gly	Ile	His	Val		Pro	Phe	Ser	Ala		Gly	Gly	Arg	Thr		Gly
128	_	_		_	245	_		_		250	_	_ •		,	255	_
	Leu	Leu	Val	_	Arg	Leu	Glu	Lys	_	GIY	Lys	Ala	Glu		Glu	Asn
130	<b>T</b>	DI	<b>3</b>	260	<b>3</b>	<b>3</b>	<b>G</b>	<b>T</b> 1 -	265	3	T1 -	<b>.</b>	3	270	3	T
	Leu	Pne	Arg	GIU	Asn	Asp	Cys		val	Arg	шe	ASN		СТА	Asp	Leu
132	7 ~~	7 an	275 Arg	7 ~~	Dho	C1	C1 n	280	C1 n	II.	Wo.+	Dha	285	C1 n	<b>3</b> .1.5	Mo+
134	Arg	290	Arg	Arg	PHE	GIU	295	міа	GIII	пть	Met	300	Arg	GIII	Ата	мес
	λνα		Pro	Tla	Tla	mrn		шic	Val	Wa l	Dro		λla	λan	Tvc	Clu
	305	T 11T	110	110	110	310	1110	1113	Val	Vai	315	Ата	лта	ROII	цуз	320
		Tvr	Glu	Gln	Leu		Gln	Ser	Glu	Lvs		Asn	Tur	Tvr	Ser	
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	Ara	Phe	Ser	Pro		Ser	Gln	Tvr	Ile		Asn	Ara	Ser	Val		Ser
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142		-	355					360			,		365			
143	Glu	Gln	Ile	Asp	Ser	His	Ser	Arg	Leu	Pro	His	Ser	Ala	His	Pro	Ser
144		370		-			375	_				380				
145	Gly	Lys	Pro	Pro	Ser	Ala	Pro	Ala	Ser	Ala	Pro	Gln	Asn	Val	Phe	Ser
146	_	_				390					395					400
147	Thr	Thr	Val	Ser	Ser	Gly	Tyr	Asn	Thr	Lys	Lys	Ile	Gly	Lys	Arg	Leu
148					405					410					415	
149	Asn	Ile	Gln	Leu	Lys	Lys	Gly	Thr	Glu	Gly	Leu	Gly	Phe	Ser	Ile	Thr
150				420					425					430		
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152			435					440					445			
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RAW SEQUENCE LISTING

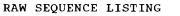
PATENT APPLICATION: US/10/079,699 TIME: 15:23:37

DATE: 03/08/2002

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Output Set: N:\CRF3\03082002\J079699.raw

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159 160	Ser	Leu	Leu	Val 500	Phe	Arg	Gln	Glu	<b>Asp</b> 505	Ala	Phe	His	Pro	Arg 510	Glu	Leu
161 162	Lys	Ala	Glu 515	Asp	Glu	Asp	Ile	Val 520	Leu	Thr	Pro	Asp	Gly 525	Thr	Arg	Glu
	Dho	Leu		Dhe	Glu	Va 1	Pro		Δen	Δen	Ser	Clv		Ala	Glv	Leu
164		530					535			_		5 <b>4</b> 0				
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		Ile	Phe	Val	Lys	Ser	Ile	Ile	Asn	Gly	Gly	Ala	Ala	Ser	Lys	Asp
168					565					570					575	
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170	T 011	Lou	C1,,		Πh γ	Non	Cln	A care		Mo+	Clu	Thr	Tou	Arg	λνα	Sar
172	ьеи	Leu	595	тур	1111	ASII	GIII	600	мта	Mer	GIU	1111	605	AIG	Alg	361
173	Met	Ser	Thr	Glu	Gly	Asn	Lys	Arg	Gly	Met	Ile	Gln	Leu	Ile	Val	Ala
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	625					630					635					640
	Gly	Pro	Glu	Leu		Ile	Glu	Thr	Ala		Asp	Asp	Arg	Glu	_	Arg
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179 180	Ile	Ser	His	Ser 660	Leu	Tyr	Ser	Gly	11e 665	Glu	Gly	Leu	Asp	Glu 670	Ser	Pro
	Ser	Arq	Asn		Ala	Leu	Ser	Arq		Met	Gly	Lys	Tyr	Gln	Leu	Ser
182			675					680					685			
183 184	Pro	Thr 690	Val	Asn	Met	Pro	Gln 695	Asp	Asp	Thr	Val	11e 700	Ile	Glu	Asp	Asp
	Δrσ		Pro	Val	T.eu	Pro		His	T.eu	Ser	Asn		Ser	Ser	Ser	Ser
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192			755	_	_			760				_	765			_
	Asp		Thr	Lys	Leu	Asn		Val	Asp	Asp	GIn		Ala	Gly	Ser	Pro
194	G	770	3	77- 1	01	D	775	T	G1	<b>T</b>	T	780	C	G	<i>a</i>	Ŧ
	785	Arg	Asp	Val	GIY	790	ser	ьeu	GTA	Leu	луs 795	гуѕ	sei	Ser	Ser	800
		Car	Tou	Cln	Thr		Wal	7 l a	Clu	Wal		Tou	7 an	C1 17	λcn	
198	GIU	261	ьец	GIII	805	мта	val	MId	GIU	810	1111	пец	MOII	Gly	815	тте
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200	110	1110	1110	820		9	110	9	825	110	1119	OTY	1119	830	Cys	11011
	Glu	Ser	Phe		Ala	Ala	Ile	qaA		Ser	Tyr	Asp	Lys	Pro	Ala	Val
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See   See	205	Ser	Ser	Arg	Ser	Gly	Arg	Glu	Ser	Val	Ser	Thr	Ala	Ser	Asp	Gln	Pro
208																	
Lys   Lys	207	Ser	His	Ser	Leu	Glu	Arg	Gln	Met	Asn	Gly	Asn	Gln	Glu	Lys	Gly	Asp
210	208					885					890					895	
Arg Asp Lys Glu Lys Asp Lys Met Lys Ala Lys Lys Gly Met Leu Lys   915   920   925   926   925   926   925   926   925   926   925   926   925   926   925   926   925   926   925   926	209	Lys	Thr	Asp	Arg	Lys	Lys	Asp	Lys	Thr	Gly	Lys	Glu	Lys	Lys	Lys	Asp
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216   945   950   950   955   960   960   217   Glu Glu Arg Ile Arg Met Lys Gln Glu Gln Glu Arg Ile Gln Ala Lys 965   970   975							_		_					_,	_,	_	
Signature   Sign			Glu	Lys	Thr	GΙĀ	_	Ile	Lys	Ile	Gln		Ser	Phe	Thr	Ser	
218				_	_,	_		_	<b>~</b> 1	- 1	- 1			~ 1	<b>a</b> 1		
The large of the			Glu	Arg	Пе		мет	ьуs	GIn	GIU		GTU	Arg	Пе	GIN		гÀг
220			7 ~ ~	C1,,	Dho		C1.,	λκα	Cln	אן א		C1,,	λκα	N an	Птт		Clu
221   The Gln Asp   Phe His Arg   Thr   Phe Gly   Cys   Asp   Asp   Glu   Leu   Met   Tyr   10000   1000   1000   1000   1000   1000   10000   1000   10000   10000   10000   10000   10000			AIG	GIU		AIG	GIU	AIG	GIII		AIG	GIU	AIG	ASP		нта	GIU
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1010			Glv		Ser	Ser	Tvr	Glu			Met	Ala	Leu			Ara	Pro
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233 Phe Glu Gln Pro Trp Pro Asn Ala Arg Pro Ala Thr Gln Ser Gly Arg 234					TOP	)				106	5				1070	)	
234	231	Gln	Ala	Lys			Glu	Asp	Val			Arg	Arg		Thr		Ser
Ser	231 232	Gln		1075	Gln 5	Asp		_	1080	Glu )	Asp			1085	Thr 5	Tyr	
1110   1115   1120   1115   1120   1135   1120   1135	231 232 233	Gln Phe	Glu	1075 Gln	Gln 5	Asp		Asn	1080 Ala	Glu )	Asp		Thr	1085 Gln	Thr 5	Tyr	
237 Arg Glu Ser Ser Gln Gln Ala Gln Arg Gln Tyr Ser Ser Leu Pro Arg 238	231 232 233 234	Gln Phe	Glu 1090	1075 Gln O	Gln 5 Pro	Asp Trp	Pro	Asn 1095	1080 <b>A</b> la	Glu ) Arg	Asp Pro	Ala	Thr	1085 Gln )	Thr Ser	Tyr Gly	Arg
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	231 232 233 234 235	Gln Phe His	Glu 1090 Ser	1075 Gln O	Gln 5 Pro	Asp Trp	Pro Glu	Asn 1095 Val	1080 <b>A</b> la	Glu ) Arg	Asp Pro	Ala Arg	Thr 1100 Gln	1085 Gln )	Thr Ser	Tyr Gly	Arg Glu
239 Gln Ser Arg Lys Asn Ala Ser Ser Val Ser Gln Asp Ser Trp Glu Gln 240	231 232 233 234 235 236	Gln Phe His	Glu 1090 Ser 5	1079 Gln O Val	Gln Pro Ser	Asp Trp Val	Pro Glu 1110	Asn 1095 Val	1080 Ala 5 Gln	Glu ) Arg Met	Asp Pro Gln	Ala Arg	Thr 1100 Gln	1089 Gln ) Arg	Thr Ser Gln	Tyr Gly Glu	Arg Glu 1120
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	231 232 233 234 235 236 237	Gln Phe His	Glu 1090 Ser 5	1079 Gln O Val	Gln Pro Ser	Asp Trp Val Gln	Pro Glu 1110 Gln	Asn 1095 Val	1080 Ala 5 Gln	Glu ) Arg Met	Asp Pro Gln Gln	Ala Arg 111! Tyr	Thr 1100 Gln	1089 Gln ) Arg	Thr Ser Gln	Tyr Gly Glu Pro	Arg Glu 1120 Arg
241 Asn Tyr Ser Pro Gly Glu Gly Phe Gln Ser Ala Lys Glu Asn Pro Arg 242	231 232 233 234 235 236 237 238	Gln Phe His 110 Arg	Glu 1090 Ser 5 Glu	1079 Gln Val Ser	Gln Pro Ser Ser	Asp Trp Val Gln 1125	Pro Glu 1110 Gln	Asn 1095 Val O Ala	1080 Ala 5 Gln Gln	Glu ) Arg Met Arg	Asp Pro Gln Gln 1130	Ala Arg 111! Tyr	Thr 1100 Gln Ser	1089 Gln ) Arg Ser	Thr Ser Gln Leu	Tyr Gly Glu Pro 1135	Arg Glu 1120 Arg
242	231 232 233 234 235 236 237 238 239	Gln Phe His 110 Arg	Glu 1090 Ser 5 Glu	1079 Gln Val Ser	Gln Pro Ser Ser Lys	Asp Trp Val Gln 1129 Asn	Pro Glu 1110 Gln	Asn 1095 Val O Ala	1080 Ala 5 Gln Gln	Glu Arg Met Arg Val	Asp Pro Gln Gln 1130 Ser	Ala Arg 111! Tyr	Thr 1100 Gln Ser	1089 Gln ) Arg Ser	Thr Ser Gln Leu Trp	Tyr Gly Glu Pro 1138 Glu	Arg Glu 1120 Arg
243 Tyr Ser Ser Tyr Gln Gly Ser Arg Asn Gly Tyr Leu Gly Gly His Gly 244 $1170$	231 232 233 234 235 236 237 238 239 240	Gln Phe His 1100 Arg Gln	Glu 1090 Ser 5 Glu Ser	1079 Gln Val Ser	Gln Fro Ser Ser Lys 1140	Asp Trp Val Gln 1125 Asn	Pro Glu 1110 Gln 5 Ala	Asn 1099 Val ) Ala Ser	1080 Ala 5 Gln Gln Ser	Glu Arg Met Arg Val	Asp Pro Gln Gln 1130 Ser	Ala Arg 111! Tyr O Gln	Thr 1100 Gln Ser Asp	1085 Gln ) Arg Ser	Thr Ser Gln Leu Trp 1150	Tyr Gly Glu Pro 113! Glu	Arg Glu 1120 Arg 5 Gln
244	231 232 233 234 235 236 237 238 239 240 241	Gln Phe His 1100 Arg Gln	Glu 1090 Ser 5 Glu Ser	1079 Gln Val Ser Arg	Gln Pro Ser Ser Lys 1140 Pro	Asp Trp Val Gln 1125 Asn	Pro Glu 1110 Gln 5 Ala	Asn 1099 Val ) Ala Ser	1080 Ala 5 Gln Gln Ser	Glu ) Arg Met Arg Val 1145	Asp Pro Gln Gln 1130 Ser	Ala Arg 111! Tyr O Gln	Thr 1100 Gln Ser Asp	1089 Gln Arg Ser Ser	Thr Ser Gln Leu Trp 1150 Asn	Tyr Gly Glu Pro 113! Glu	Arg Glu 1120 Arg 5 Gln
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	231 232 233 234 235 236 237 238 240 241 242	Gln Phe His 1109 Arg Gln Asn	Glu 1090 Ser 5 Glu Ser	OVal Ser Arg Ser 1159	Gln Pro Ser Ser Lys 1140 Pro	Trp Val Gln 1129 Asn Gly	Pro Glu 1110 Gln 5 Ala Glu	Asn 1099 Val ) Ala Ser Gly	1080 Ala 5 Gln Gln Ser Phe 1160	Glu ) Arg Met Arg Val 1145 Gln	Asp Pro Gln Gln 1130 Ser Ser	Ala Arg 111! Tyr Gln Ala	Thr 1100 Gln Ser Asp	1089 Gln Arg Ser Ser Glu 1169	Thr Ser Gln Leu Trp 1150 Asn	Gly Glu Pro 1139 Glu Pro	Arg Glu 1120 Arg Gln Arg
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	231 232 233 234 235 236 237 238 239 240 241 242 243	Gln Phe His 1109 Arg Gln Asn	Glu 1090 Ser 5 Glu Ser Tyr	OVal Ser Arg Ser 1155	Gln Pro Ser Ser Lys 1140 Pro	Trp Val Gln 1129 Asn Gly	Pro Glu 1110 Gln 5 Ala Glu	Asn 1099 Val Ala Ser Gly	1080 Ala Gln Gln Ser Phe 1160 Arg	Glu ) Arg Met Arg Val 1145 Gln	Asp Pro Gln Gln 1130 Ser Ser	Ala Arg 111! Tyr Gln Ala	Thr 1100 Gln Ser Asp Lys	On the second se	Thr Ser Gln Leu Trp 1150 Asn	Gly Glu Pro 1139 Glu Pro	Arg Glu 1120 Arg Gln Arg
248       1205       1210       1215         249 Pro Ser Asn Tyr Asp Ser Tyr Lys Lys Val Gln Asp Pro Ser Tyr Ala       250       1220       1225       1230         251 Pro Pro Lys Gly Pro Phe Arg Gln Asp Val Pro Pro Ser Pro Ser Gln	231 232 233 234 235 236 237 238 240 241 242 243 244	Gln Phe His 1100 Arg Gln Asn Tyr	Glu 1090 Ser 5 Glu Ser Tyr Ser 1170	Ser Arg Ser 1155	Gln Pro Ser Ser Lys 1140 Pro Tyr	Asp Trp Val Gln 112: Asn Gly Gln	Pro Glu 1110 Gln Ala Glu Gly	Asn 1099 Val Ala Ser Gly Ser 1179	Gln Gln Ser Phe 1160 Arg	Glu Arg Met Arg Val 1145 Gln Asn	Asp Pro Gln Gln 1130 Ser Ser Gly	Ala Arg 111: Tyr Coln Ala Tyr	Thr 1100 Gln Ser Asp Lys Leu 1180	Ser Glu 1165	Thr Ser Gln Leu Trp 1150 Asn 5	Gly Glu Pro 1139 Glu Pro His	Arg Glu 1120 Arg Gln Arg Gly
249 Pro Ser Asn Tyr Asp Ser Tyr Lys Lys Val Gln Asp Pro Ser Tyr Ala 250 1220 1225 1230 251 Pro Pro Lys Gly Pro Phe Arg Gln Asp Val Pro Pro Ser Pro Ser Gln	231 232 233 234 235 236 237 238 240 241 242 243 244 245	Gln Phe His 1100 Arg Gln Asn Tyr Phe	Glu 1090 Ser 5 Glu Ser Tyr Ser 1170 Asn	Ser Arg Ser 1155	Gln Pro Ser Ser Lys 1140 Pro Tyr	Asp Trp Val Gln 112: Asn Gly Gln	Pro Glu 1110 Gln Ala Glu Gly Met	Asn 1099 Val Ala Ser Gly Ser 1179 Leu	Gln Gln Ser Phe 1160 Arg	Glu Arg Met Arg Val 1145 Gln Asn	Asp Pro Gln Gln 1130 Ser Ser Gly	Ala Arg 1119 Tyr Gln Ala Tyr Glu	Thr 1100 Gln 5 Ser Asp Lys Leu 1180 Leu	Ser Glu 1165	Thr Ser Gln Leu Trp 1150 Asn 5	Gly Glu Pro 1139 Glu Pro His	Arg Glu 1120 Arg Gln Arg Gly Gly
250 1220 1225 1230 251 Pro Pro Lys Gly Pro Phe Arg Gln Asp Val Pro Pro Ser Pro Ser Gln	231 232 233 234 235 236 237 238 249 241 242 243 244 245 246	Gln Phe His 1100 Arg Gln Asn Tyr Phe 1189	Glu 1090 Ser 5 Glu Ser Tyr Ser 1170 Asn	Ser Arg Ser 1155 Ser	Gln Pro Ser Ser Lys 1140 Pro Tyr Arg	Asp Trp Val Gln 112! Asn Gly Gln Val	Pro Glu 111( Gln  Ala Glu Gly Met 119(	Asn 1099 Val ) Ala Ser Gly Ser 1179 Leu	1080 Ala Gln Gln Ser Phe 1160 Arg Glu	Glu Arg Met Arg Val 1145 Gln Asn	Asp Pro Gln Gln 1130 Ser Ser Gly Gln	Ala Arg 111! Tyr Gln Ala Tyr Glu 119!	Thr 1100 Gln Ser Asp Lys Leu 1180 Leu	Ser Glu 1165 Gly Leu	Thr Ser Gln Leu Trp 1150 Asn Gly Arg	Gly Glu Pro 1139 Glu Pro His	Arg Glu 1120 Arg 5 Gln Arg Gly Glu 1200
251 Pro Pro Lys Gly Pro Phe Arg Gln Asp Val Pro Pro Ser Pro Ser Gln	231 232 233 234 235 236 237 238 249 241 242 243 244 245 246 247 248	Gln Phe His 1100 Arg Gln Asn Tyr Phe 1189 Gln	Glu 1090 Ser 5 Glu Ser Tyr Ser 1170 Asn 5	1079 Gln Val Ser Arg Ser 1159 Ser Ala Arg	Gln Pro Ser Ser Lys 1140 Pro Tyr Arg Lys	Asp Trp Val Gln 1129 Asn Gly Gln Val Glu 1209	Pro Glu 1110 Gln Ala Glu Gly Met 1190 Gln 5	Asn 1099 Val ) Ala Ser Gly Ser 1179 Leu	Gln Gln Ser Phe 1160 Arg Glu Met	Glu Arg Met Arg Val 1149 Gln Asn Thr	Asp Pro Gln Gln 1130 Ser Ser Gly Gln Lys 1210	Ala Arg 111! Tyr Gln Ala Tyr Glu 119! Gln	Thr 1100 Gln Ser Asp Lys Leu 1180 Leu Pro	Ser Ser Glu 1169 Gly Leu Pro	Thr Ser Gln Leu Trp 1150 Asn Gly Arg Ser	Gly Glu Pro 1139 Glu Pro His Gln Glu 1219	Arg Glu 1120 Arg Gln Arg Gly Glu 1200 Gly 5
	231 232 233 234 235 236 237 238 249 241 242 243 244 245 246 247 248	Gln Phe His 1100 Arg Gln Asn Tyr Phe 1189 Gln	Glu 1090 Ser 5 Glu Ser Tyr Ser 1170 Asn 5	1079 Gln Val Ser Arg Ser 1159 Ser Ala Arg	Gln Pro Ser Ser Lys 1140 Pro Tyr Arg Lys	Asp Trp Val Gln 1129 Asn Gly Gln Val Glu 1209	Pro Glu 1110 Gln Ala Glu Gly Met 1190 Gln 5	Asn 1099 Val ) Ala Ser Gly Ser 1179 Leu	Gln Gln Ser Phe 1160 Arg Glu Met	Glu Arg Met Arg Val 1149 Gln Asn Thr	Asp Pro Gln Gln 1130 Ser Ser Gly Gln Lys 1210	Ala Arg 111! Tyr Gln Ala Tyr Glu 119! Gln	Thr 1100 Gln Ser Asp Lys Leu 1180 Leu Pro	Ser Ser Glu 1169 Gly Leu Pro	Thr Ser Gln Leu Trp 1150 Asn Gly Arg Ser	Gly Glu Pro 1139 Glu Pro His Gln Glu 1219	Arg Glu 1120 Arg Gln Arg Gly Glu 1200 Gly 5
252 1235 1240 1245	231 232 233 234 235 236 237 238 249 241 242 243 244 245 246 247 248 250	Gln Phe His 1100 Arg Gln Asn Tyr Phe 1189 Gln Pro	Glu 1090 Ser 5 Glu Ser Tyr Ser 1170 Asn 5 Arg Ser	Ser Arg Ser 115: Ser Ala Arg	Gln Fro Ser Ser Lys 1140 Pro Tyr Arg Lys Tyr 1220	Asp Trp Val Gln 1129 Asn Gly Gln Val Glu 1209 Asp	Pro Glu 1110 Gln Ala Glu Gly Met 1190 Gln Ser	Asn 1099 Val Ala Ser Gly Ser 1179 Leu Gln	1080 Ala Gln Gln Ser Phe 1160 Arg Glu Met Lys	Glu Arg Met Arg Val 1149 Gln Asn Thr Lys Lys 1229	Asp Pro Gln Gln 1130 Ser 5 Ser Gly Gln Lys 1210 Val	Ala Arg 111! Tyr Gln Ala Tyr Glu 119! Gln Gln	Thr 1100 Gln Ser Asp Lys Leu 1180 Leu Pro	1089 Gln Arg Ser Ser Glu 1169 Gly Leu Pro	Thr Ser Gln Leu Trp 1150 Asn Gly Arg Ser Ser 1230	Tyr Gly Glu Pro 1139 Glu Pro His Gln Glu 1219 Tyr	Arg Glu 1120 Arg 5 Gln Arg Gly Glu 1200 Gly 5 Ala
	231 232 233 234 235 236 237 238 249 241 242 243 2445 246 247 248 250 251	Gln Phe His 1100 Arg Gln Asn Tyr Phe 1189 Gln Pro	Glu 1090 Ser 5 Glu Ser Tyr Ser 1170 Asn 5 Arg Ser	1079 Gln Val Ser Arg Ser 1159 Ser Ala Arg Asn Lys	Gln Fro Ser Ser Lys 1140 Pro Tyr Arg Lys Tyr 1220 Gly	Asp Trp Val Gln 1129 Asn Gly Gln Val Glu 1209 Asp	Pro Glu 1110 Gln Ala Glu Gly Met 1190 Gln Ser	Asn 1099 Val Ala Ser Gly Ser 1179 Leu Gln	1080 Ala Gln Gln Ser Phe 1160 Arg Glu Met Lys Gln	Glu Arg Arg Met Arg Val 1149 Gln Asn Thr Lys Lys 1229 Asp	Asp Pro Gln Gln 1130 Ser 5 Ser Gly Gln Lys 1210 Val	Ala Arg 111! Tyr Gln Ala Tyr Glu 119! Gln Gln	Thr 1100 Gln Ser Asp Lys Leu 1180 Leu Pro	1089 Gln Arg Ser Ser Glu 1169 Gly Leu Pro Pro Ser	Thr Ser Gln Leu Trp 1150 Asn Gly Arg Ser Ser 1230 Pro	Tyr Gly Glu Pro 1139 Glu Pro His Gln Glu 1219 Tyr	Arg Glu 1120 Arg 5 Gln Arg Gly Glu 1200 Gly 5 Ala

Use of n and r or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa



VERIFICATION SUMMARY

PATENT APPLICATION: US/10/079,699

DATE: 03/08/2002

TIME: 15:23:38

Input Set : A:\2104seq.txt

Output Set: N:\CRF3\03082002\J079699.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application Number

L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:280 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4

L:303 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6

L:326 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8

L:349 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 L:372 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12